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IMPACT OF IMAGINE LEARNING ENGLISH IN TWO NORTHERN MISSISSIPPI SCHOOLS

Dawn Waddell

Master of Arts

Teaching English as a Second Language

May 2011

University of Mississippi

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ABSTRACT

This paper describes an effectiveness study of the impact that the computer program Imagine Learning English (ILE) has had on English language learning. The study sought to determine the impact of ILE on the annual yearly progress and reading skills of mid-level English language learners (ELL). The objective of the study was to see if fifteen or more hours using ILE was successful in raising the reading comprehension skill scores of English Language Learners (ELL) who worked the program as a language training tool. This study is the result of data that was collected from students in grades 3 through 5 with English Language Proficiency (ELP) levels of two through four. End-of the year test results were compared in the following categories: World-Class Instructional Design and Assessment's (WIDA), ACCESS for ELLs and Northwest Evaluation Association's Measures of Academic Progress (MAP). The results were further broken down into grade and ELP levels to see if the subgroups showed variance.

DEDICATION PAGE

This paper is dedicated to my husband, Dr. Gregory S. Waddell. He has been my encourager, proof reader and computer technician from start to finish. I could not have done this without his confidence in my budding abilities and his ever present support.

LIST OF ABBREVIATIONS OR SYMBOLS

CAI	Computer assisted instruction
CALL	Computer Assisted Language Learning
ELL	English Language Learner
ELP	English language proficiency
ESL	English as a Second Language
ILE	Imagine Learning English
LAN	Local area networks
L2	Second Language
MAP	Measures of Academic Progress
PBR	Phonics Based Reading
SLA	Second language acquisition
SOS	Strategies for Older Students
TESL	Teaching English as a Second Language

WIDA World-Class Instructional Design and Assessment

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TABLE OF CONTENTS

Co	pyright Page	i
Ab	ostract	ii
De	edication Page	iii
Lis	st of Abbreviations or Symbols	iv
Ac	knowledgements	v
Tal	able of Contents	vi
Fig	gures	viii
Im	pact of Imagine Learning English in Two Northern Mississippi Schools	1
I.	Project Background	2
	Research Questions	2
	Design of the Study	3
	Participants	3
	Rationale for the Study	4
II.	Literature Review	7
	History of CALL	7
	Components of Imagine Learning English	13

III.	Methodology	27
	Samples and Procedures	27
	Assessment Instruments	30
IV.	Results	33
	Data	33
	Interpretation	36
V.	Discussion	38
	The Research Questions	38
	Limitations	39
	Suggestions for Future Research	40
List	t of References	43
VIT	ΓΑ	51

Tables

Table 1. Student Demographics	28
Table 2. Breakdown by Gender	29
Table 3. English Language Proficiency2	29
Table 4. Student Grades	29
Table 5. ACCESS	35
Table 6. MAP3	36
FIGURES	
Figure 1. MAPS Growth	31
Figure 2. ACCESS Growth	32
Figure 3. MAPS Growth 09-10	34
Figure 4. ELP Growth 09-10	34

IMPACT OF IMAGINE LEARNING ENGLISH IN TWO NORTHERN MISSISSIPPI SCHOOLS

This paper describes an effectiveness study designed to measure the impact that the computer program *Imagine Learning English* (ILE) has had on English Language Learners (ELLs). Specifically, the study sought to determine the impact of ILE on the annual yearly progress and reading skills of mid-level ELLs in Desoto County, Mississippi during the school year of 2009-2010 The paper is divided into four main sections. The first section, Project Background, describes the research questions, research design, and participants. The second section presents a Literature Review on the history of Computer Assisted Language Learning (CALL); including Imagine Learning English and other similar computerized language learning programs. The third section discusses the methodology that used for the study. Those parts are followed by a discussion of the implications of this study for teaching ELL students. It is the author's opinion that such information from this study may prove helpful in making future decisions about the incorporation of computer assisted language learning tools for elementary education.

I. PROJECT BACKGROUND

There is an urgent need to get young ELL students quickly caught up as quickly as possible with the mainstream student population. Because of this need developers offer computer programs said to aid in the process of mainstreaming English language learners. Extensive research points to the need for wide vocabularies and good reading skills to guarantee success in school (Engen, 2002, Bucolo, 2010, Baker, Simmons, & Kameenui, 1995, Goodwin Jones, 2010, Hudson, Lane, &Pullen, 2005, Macaruso, Hook, & McCabe, 2006 Peregoy & Boyle, 2008).

Because of the need for extensive vocabularies and reading comprehension skills the developers of ILE have incorporated these elements into their program for ELLs. As a teacher whose students have access to the program, I conducted a study to determine the benefits of ILE at the schools where I work. This report presents the findings of that study.

Research Questions

The following research questions guided the design of this study and the data analysis.

- 1. Do students who use ILE for fifteen plus hours have greater improvement on the World-Class Instructional Design and Assessment (WIDA) ACCESS when compared to those who do not?
- 2. Do students who use ILE for fifteen plus hours have greater improvement on Measures of Academic Progress when compared to those who do not?
- 3. How does the progress differ among the three proficiency levels that participated in the study?
- 4. How does the progress differ among the three grade levels that participated in the study?

The research is based on the above questions and my observations of student performance on their year-end test results of those who participated in the study. The research design used for this study will now be addressed.

Design of the Study

The program's effectiveness was evaluated using a pretest/post-test design. ELL students are tested annually for their English Language Proficiency (ELP) levels. All students began the study with the Spring 2009 WIDA ACCESS scores and were evaluated using Spring 2010 scores. The second pretest/post-test evaluation was done using the results of a district wide skills-based assessment administered in the fall, winter and spring of the school year 2009 through 2010. For the purposes of this study only the fall 2009 and spring 2010 scores were evaluated.

Additional data were collected to determine the socioeconomic levels of the participants of the study, the place of birth to help determine amount of time in United States, the amount of time in U. S. schools, the home language, and their gender.

Participants

The study was conducted with a convenience sample of thirty ELL participants from two schools, grades three through five, who had access to the ILE program. In order to be selected as a participant in the study, the students must have used the ILE program from fifteen to fifty-four hours during the school year. These results of the treatment group were then compared to a contrast group which consisted of thirty-three ELL students from three other district schools, in grades three through five, and were functioning at the same ELP levels (two, three and four).

Before proceeding with any research project, it is important to understand why that research is important. The rationale for this research will now be discussed.

Rationale for the Study

One reason for pursuing this study is that much has already been invested in the purchase and use of this tool. Three computer labs had already been set up, training for ELL teachers had been undertaken on-site, and individual licenses had been purchased for a number of ELL students in these two schools in northern Mississippi. From a sense of responsibility, it seemed appropriate that a study be conducted to show what kind of return on the investment that the tax payers of Mississippi are receiving from the district's purchase of this technology.

Not only are the taxpayers making an investment, but the students themselves are being asked to spend considerable amounts of their school time using the tool. The ELL students are required to spend two one-half hour sessions at ILE each week throughout the school year. The trial schools are part of a growing school district and one of the largest ELL target language learner groups in the state of Mississippi. As the ELL population continues to grow, the schools need access to training tools that will benefit this special population.

Computer assisted learning has become the future of learning. Many classrooms have electronic interactive boards which are attached to their computers and many lessons are presented through this medium. Every day, individual students are sent to the computer for developmental work, whether in math or for reading skills. In many schools ELLs are required to complete computer programs which have been designed to teach speaking skills. Through the computerized program's use the ELLs are expected to improve their language skills in English.

Because students work on English language skills programs at set hours during the week, they are removed from their regular classrooms causing them to miss content instruction. Is ILE instruction sufficiently beneficial to the ELL students that it warrants removal from regular classes or could there be another alternative to ILE? For example, ELLs in many schools receive

language instruction while in class without any additional computer support. Alternatively, in a program considered to be total immersion, the ELLs learn the target language while receiving academic instruction in English (Cohen & Swain, 1976). Immersion is the most prevalent method in most schools with low enrollment of ELLs, and Immersion is the only method in used in the contrast schools which were chosen for this study.

ILE is a recent addition to computer programs which have been designed to aid language learners. It first appeared in a pilot study of kindergarten and first grade, levels 1 and 2 in an Illinois school in 2005-2006. According to results of this study, the ELL students showed marked improvement in test scores when compared to a contrast group that did not receive the computer treatment (Timney & Timney, 2007). Similar success was shown in the California study Evaluating the effectiveness of Imagine Learning English in Chula Vista school district state of California. JointStrategy Consulting was the group responsible for the study and they worked with beginner, low and at-risk students in the sixth grade (Nelson, 2008). No studies have yet explored the effect of ILE use on elementary school students with intermediate (levels 2-4) English language proficiency levels. This study aims to fill that gap by determining if ILE increases standardized test scores when compared with ELL students of comparable ELP levels who did not use the program.

Observations made as I worked with two schools that used the ILE program contributed to my interest in doing this research. As part of the weekly interventions, ELLs were given specific times to work on ILE. They had to leave their regular classrooms and go to the Immersion English Classroom to work on the computer. As part of my supervision I provided hall passes for the students with their scheduled days and times, sent time chart to the teachers, and reviewed nine-week usage rates to check for compliance. The participants of the study were

evenly distributed across the school; many classrooms having two or more students who qualify for the ILE program. However, it was the responsibility of the students and the teachers to remember the designated times for using ILE in the computer lab.

As the year progressed, some students did not appear to be using ILE as had been suggested. Even after repeated encouragement to use the program, shifting computer time slots to better accommodate teachers' schedules, and emails from the school principal encouraging program use, certain ELLs did not increase ILE time use. Some of the non-users were low intermediate ELLs who struggled with reading and comprehension skills. On the other hand, many low intermediate level ELL students continued to struggle with school work even after a year of high ILE program use. This caused me to doubt the assumption of the added benefit from high program use in comparison with ELLs who did not use the program.

The next section reviews literature related to this study and will concentrate on the development of current computer materials available for students entering the school system in the United States with little or no English language skills. Best practices and current educational trends will be addressed in regards to Computer Assisted Language Learning.

II. LITERATURE REVIEW

Egbert (2005) defines Computer Assisted Language Learning (CALL) as using a computer to assist instruction in language teaching and learning in any way. This definition applies to any target language being learned, the four domains of language, and the material or topics studied. CALL implements various software tools to promote the acquisition of language. Software tools include any computer-generated, technology-enhanced medium used in the language teaching and learning environment (Levy, 1997, Egbert & Hansen Smith, 1999). CALL includes but is not limited to the following technologies: computers, audio recorders, Internet access, local area network (LAN), texting and email (Egbert, 2005). Egbert & Petrie sum up CALL by saying learners can learn languages in any context with, through and around computer technologies (2005). The next paragraphs will summarize the development of computers and language learning up to the current CALL applications in use.

History of CALL

The first phase of CALL began when the large mainframe computers improved to the point of allowing programming languages in the 1950's. Linguists developed concordances for text analysis (Brown & Fotos, 2004). Simple non-interactive drill and testing programs appeared in the early 1950's in spite of the need to punch the answers on data cards. This first phase of CALL is termed Behavioristic CALL (Warschauer & Kern, 2000). It copied the classroom teaching methods of the 1950's through the 1960's; habit formation through audio-lingual and structural linguistics (Brown & Fotos, 2004, Warschauer & Kern, 2000). With that as a basis CALL included drills and practice programs that supplemented classroom instruction.

Behaviorist CALL. The 1960's saw mainframe computers connected to a terminal on a campus, or by telephone wires to an off campus site (Chapelle, 2001). Developers created computer based learning activities called 'courseware' that students could access using one of the mainframe computers. This central location for the hardware allowed for record keeping and communication among program users. The programs were developed on campus and were expensive to write and maintain (Chapelle, 2001). An early project by Atkinson (1966) found that learning could be enhanced by having the computer program select the items for practice based on previous student achievements. The overall emphasis of the mainframe computer era was to provide the student with practical applications and efficient computer usage (Chapelle, 2001). These initial programs influenced a major governmental grant issued in the early 1970's that brought a change in language learning approaches.

The two governmental projects created systems that included major language learning components (Chapelle, 2001). In the PLATO project, software was developed specifically for language instruction as requested by individual professors (Hart, 1995). Theoretical and experimental programming, as well as data analysis, played a negligible role (Hart, 1995). With these projects the Behaviorist approaches gave way to communicative meaning-focused language learning methods in the 1970's (Richards & Rodgers, 2001). Courseware supported audio, graphics and the grammar drill "to a high state of sophistication" (Hart, 1981). At the time "question, answer, feedback sequences" were standard procedures for language design (Hart, 1995, p. 20). Because of the centralized computer laboratory on the university campus, student work provided data for investigations and led to a faculty with SLA teaching skills (Chapelle, 2001). The commercial attempt of using PLATO as a springboard floundered, audio-lingualism declined, the communicative competence movement gained in popularity over the behaviorists

theory; factors which brought a close to the 70's era (Hart, 1995). The 1980's started with an even greater possibility for language learning interaction.

Communicative CALL. Computers no longer needed a mainframe or connection to a university, so individuals were able to purchase them for private use. Computer purchases jumped to 2.8 million units in 1982 (Bush & Terry, 1997). Language teachers with personal computer access began writing interactive computer programs (Levy, 1997). This budding generation of CALL software became known as communicative CALL (Brown & Fotos, 2004, Warschauer & Kern, 2000). Emphasis was on the use of the language rather than language forms in isolation. The grammar list trend changed to language with a purpose. The computer continued as the tutor for the student with no feedback as students worked on cloze tests, language games and puzzles.

Krashen's unconscious acquisition theory influenced computer programming during the 1980's (Chapelle, 2001). Acquisition theory states that a learner is unable to articulate a semantic or syntactic rule pertaining to language use, other than saying "it sounds right" (Lewicki, Hoffman & Czyzewska, 1987). Our intelligence, according to Lewicki, Hill & Czyzewska (1992) is equipped to process complex knowledge structures faster than our ability to think and identify meaning in a contrasted manner. Chomsky's linguistic competence includes the unconscious, "tacit knowledge of the rules of grammar" that allows the student to produce appropriate language for a social situation (Underwood, 1984, p. 13). This is why students soon sound fluent in spoken English but struggle to write fluent sentences without grammatical errors. Computer programs were developed to concentrate on providing a relaxed and supportive atmosphere for the language student. By making material relevant to the students' interest, language learning could then be used in appropriate high interest, social contexts.

Even though programming power and possibilities doubled every two years, many students never benefited from the resource due to the cost involved (Bush & Terry, 1997). According to Bush and Terry, schools began acquiring computers, yet teacher preparation was not available to fully implement its potential. In reaction to criticisms against the mechanized drills, such as cloze activities, developers in the 1990's worked to change computer software to a stimulus model. The 1990's software attempted to stimulate student's motivation, critical thinking, creativity, and critical thinking skills rather than merely achieving a correct answer or being given a definition (Fotos & Brown, 2004, p.6). Levy (1997) described this computer usage as providing students with the means to become active learners (Fotos & Brown, 2004). Available software that students started using as language learning activities included desktop publishing and word processors. Computer writing tools encouraged the production of writing for publishing purposes across all ages and language ability levels. Writing programs have spell and grammar checkers as well as concordances and dictionaries. Students are able to access synonyms and build larger vocabularies when writing on the computer. Having these resources a click away facilitated immediate access, rather than the time consuming actual book access. The mid 1990's saw the next era of computer technology, that of integrative CALL.

Integrative CALL. In the mid-1990's powerful desktop computers linked to rapid internet connections led to highly interactive and individualized language learning methods. The multimedia language program allows a student to read a text in the target language, watch a movie of the same passage, study grammar and pronunciation of words from the text, get support in the student's first language, take a comprehension test and receive immediate feedback—all within the same program (Fotos & Brown, 2004). The main focus of this highly interactive and individualized approach is that the modules support the student's individual learning skills

(Warschauer & Kern, 2000). For example, visual learners see the action which aids understanding. Local area networks (LAN's) are used to be able to write interactively, email, take on-line classes, and become involved in multiplayer games and real-time learner activities. All of these promote the use of computer for language learning because the student gets real-time responses from other language learners going through the same learning process. LANs are the source for information retrieval and on-line discussion groups. Now the language learner has autonomy; they are allowed to discover things through their own initiative. This is the current view governing CALL in the 2000's (Healy, 1999). With the advent of the Internet and the growing demand for better access we have entered what is called the Information Age.

Information Age. The Information Age has been defined as "the exploding demand for communications applications of all kinds" (Turner, 2002). CALL is moving away from language learner software and CD's to the Web-based activity that allows the learners a flexible, self-paced schedule (Warschauer, 1999). Web-based communication is seen as a meaningful, purpose driven learning tool by both teachers and students (Fotos & Brown, 2004). It brings current events from the lives of students into the classroom for immediate communication interactions with other learners. The teacher oriented classroom has shifted away from teacher directed classes into a student governed system where technology and individual learner goals contrast the lesson content and the learning process (Fotos & Brown, 2004). This shift to student led independent studies, where daily communication and lifelong learning has become central has been coined "information literacy" (Koh & Herring, 2007).

The internet is an authentic, low-cost tool that makes language learning meaningful (Warschauer, Shetzer & Meloni, 2000). Computer use should inject vitality into teaching and motivate students as they communicate not only in the arena of learner to content, but also

learner to learner (Moore, 1993). This is a communication medium that is flexible, "constantly changing and connected to real life needs" (Warschauer, Shetzer & Meloni, p. 7). Students take responsibility for the interaction where clarifications must be made as they "explain their thoughts, develop and justify their ideas and question each other to negotiate meaning" to be understood (Hacker & Niederhause, 2000, p. 55). Even though the computer is helpful, it is not guaranteed that the student will learn just by sitting in front of it. It is not so much the technology as the teaching that is going to make the difference (Warschauer, Shetzer & Meloni).

The learner-content computer interaction has a student working within the context of print, where students' synthesize material found in some print source (Moore, 1993, Chou, 2003). A basic premise of print is that a student has literacy skills for deciphering the form of print. Interactive computer skills do not necessarily mean that a student has a grasp of information literacy. The student may rely on guesswork by clicking on one of the multiple answer choices, only to find that they have the initial question repeated and the answer choices, minus the previous selection, available for a second try. Chou (2003) describes the learner-content interactivity as adaptable, non-sequential, open to choice, responsive to user, and containing an element of playfulness (p. 271). The student has some freedom in selection of the activity they wish to do. Computer programs offer different teaching strategies and learner outcomes. What follows will be a description of the components of *Imagine Learning English* as related to research.

So far this review has sought to show that computer-assisted technologies have firm roots into the educational system in the United States. Having surveyed the literature related to the general area of computer-assisted language learning, the particular components of ILE will now be discussed.

Components of Imagine Learning English

Imagine Learning English is divided into four areas of concentration: (a) vocabulary, (b) listening and speaking skills, (c) language conventions, and (d) literacy. The program carefully integrates technology and successful teaching strategies to give the English language learner a strong foundation (Imagine Learning, 2007). The primary teaching strategies in the program are modeling and scaffolding, using audio, colorful graphics, and animated characters. Each of these will now be described.

Modeling and scaffolding. ILE uses scaffolding extensively throughout the introductory phases of the program. Scaffolding instruction can be defined as the "sequencing of prompted content, materials, tasks, and teacher and peer support to optimize learning" (Dickson, Chard, & Simmons, 1993). A scaffold usually gives support during the learning stages and is removed after competency levels have been demonstrated. It is nonintrusive intervention, giving pertinent information and instruction meant to build upon the student's +1 Zone of Proximal Development (Rothenberg and Fisher, 2007).

As students learn a new concept, teacher modeling and the supports optimize learning until students can apply the skills and strategies independently (Rosenshine, & Meister, 1992). Ellis and Larkin (1998) provide a framework for incorporating scaffolding. First, the teacher models the new skill. This could be presented with her thinking aloud, talking her way through the thought process as the steps are described to complete the task. Next, the class does it together with the teacher adding her suggestions to the process. Then students do it in cooperative groups, until finally they are ready to work alone. Larkin (2002, p. 2) states that scaffolding should be used with "those students who need it, only when they need it." This means that the teacher will need to know what the student can do, success must be achieved

quickly, and for the teacher to stop drilling when the student has had enough (Larkin, 2001). In the ILE program, the computer introduces a new concept, the student is talked through how to use the program with on-screen flashing to show where he/she needs to move the mouse, and this is repeated until mastery is achieved. It is important to understand that many students enter our schools with no previous computer experience. Thus, the mouse, how to hold it and move it over an on-screen picture, is as foreign to them as the daily school routine. Since sessions are only thirty minutes long, the repetition is done in the sessions that follow until mastery has been achieved. The program scaffolds instruction by building upon previously learned skills.

Scaffolding includes making connections in the new lesson to the previous one by linking the new information to what is already known (Rothenberg & Fisher, 2007). This is done by activating a student's prior knowledge; looking for the familiar aspects of the concept that can be linked to the new topic. A picture or short film can introduce the topic. Previously taught material or a personal experience could be linked to the new material (Rothenberg & Fisher). Many students lack the depth of knowledge that a teacher has about the meanings of a word or concept. Giving students not only the verbal associations of a word, but also a visual, will aid retention. The top level of word depth knowledge includes the sound of the word, the written form, a definition, and how it appears in context. This enables a person to link a new word to a specific definition in a single context (Baker, Simmons, Kameenui, 1995). ELL students have partial conceptual knowledge of words. They may recognize semantic features and can use a word in limited contexts, but have difficulty discriminating meanings compared to the native speaker (Baker et al., 1995). Full concept knowledge understands the word in novel contexts, knows the various meanings of multiple meaning words, and can discriminate slight nuances of synonyms (Baker et al., 1995). ILE approaches word depth of knowledge by concentrating on

academic terms with the presentation given in a contextual setting, in which the word would normally be seen and used. The program also shows and works with the semantic features of words and word families.

Vocabulary. Vocabulary knowledge plays a key role in language acquisition and reading proficiency. In order to get meaning from reading the ELL student must be able to understand ninety-five percent of the vocabulary in the reading passage (Slough & Rupley, 2010). Optimal learning should include deep understanding, be built upon the reader's prior knowledge, and promote active self-regulated learning. Deep understanding would include comprehension of the passage and the ability to rephrase or recall information from the text after reading (O'Malley & Pierce, 1996). Students need comprehension strategies to move beyond the basic decoding skills. A clear sense of a word's full meaning can only be achieved by multiple encounters in different contexts (Tozcu & Coady, 2004). Instruction of academic language should include connections in all subject areas so that the ELL student can see the relation to different topics and can begin to learn the depth of meaning that a single word can contain (Feldman & Kinsella, 2005). Krashen claims that additional supports are less significant than reading a variety of texts at a comprehensible level. Thus, recreational readers show more gains in reading (Cummins, Brown & Sayers, 2007, p.107). Reading fluency is one of the defining characteristics of a good reader, while lack of fluency is commonly found among poor readers (Hudson, 2005). An increase in word recognition speeds in poor readers will increase comprehension (Tozcu & Coady, p.479). Fluency comprises the following three elements; connecting text, conversational reading rate, and appropriate prosody (Hudson, Pullen, & Lane, 2005, p.702). Hudson et al. describe prosody as the ability to read with variations in pitch that contributes to an expressive reading. Automaticity is the quick and effortless connection of text that conveys meaning. ILE uses

leveled books and reads these to the user. The text on the screen highlights as the words are read. Pages are turned automatically during the first reading, and by the student for subsequent readings. Students can record their own reading of the book and play it back, making rerecordings if desired. Another aspect of ILE is the use of prior knowledge.

Prior knowledge. A reader's prior knowledge should be stimulated in order to aid the process of comprehension and automaticity. A study by Gonzalez, et al. (1993) showed that working-class second language (L2) speakers bring with them into the school cultures that are rich in social and intellectual resources. An instructor's task is to connect what is known to what is to be learned. The brain functions best when it can connect to familiar ideas and take the parts and make them relate to the whole (Rothenberg & Fisher, 2007). New experiences are catalogued into compartments where they are added to the schema that the student brings to the class with them. The understanding of new ideas is best acquired when connected to a familiar concept. "A strong foundation in the primary language will facilitate transfer to English" and aid in promoting active self-regulated learning (Rothenberg & Fisher, p.199). All of the language introduction and connections in ILE are made through the visual medium. ILE uses video of the classroom and playground to show new vocabulary. The students see what they are familiar with. All new vocabulary is introduced with pictures so that the student can connect with known objects or items. ILE uses captivating graphics and real people in their design features.

Graphics. Part of the attraction of a computer program is in the design features of the program. This includes finding appropriate graphics, pictures that represent the actions, choosing appropriate background colors and linking to other information (Warschauer, 1999). According to Bolter (1996) students have a natural tendency to be drawn to pictures or drawings. They depict and convey much more effectively than words the meaning an author hopes to convey.

"Use of graphical material in writing . . . corresponds to a natural human desire for multimodal communication" (Warschauer, 1999). Learning through a combination of media is considered good education where educators can reach out to learners no matter what their preferred learning style (Warschauer, 1999). This allows for language learning strategies that fit a student's personal strengths. Students of all backgrounds are fascinated with the capacities of the computer (Warschauer, 1999). ILE has created an Island society of fanciful creatures who interact in different manners. Students are given the freedom to make selections for putting together creative cars, coloring pictures and playing games. ILE is careful about presenting words in context before using them in a segmenting activity. When words are taken out of context, students are disconnected to the text. Put the word in a visual context and understanding develops faster. Parts of the visual stimuli are the abundant use of subtitles.

Subtitles. ILE uses subtitles extensively throughout their program; subtitles appear when reading stories, comprehension questions are read with highlighting progression, and games use words or parts of words. A subtitle can be added to a still life picture from a storybook or to a video scene. Sydorenko (2010) studied the effects of videos without captions versus with captions. Her findings show that captioning videos tend to aid recognition of written word forms while no captioning engages the listening comprehension of aural word forms. Captioning can engage student's attention, reduces anxiety, and gives visual and aural input (Winke, Gass, & Sydorenko, 2010). A student activates both verbal and non-verbal systems for better recall through the use of captioning (Sydorenko, 2010). Visual and aural stimuli will lead to deeper understanding of the content presented in the lesson. Through computer programs, books, videos and movies can be read with captioning, modeling the reading process for a new learner.

Listening and speaking. ILE incorporates listening and speaking skills into its program. Activities are introduced orally, then modeled for the student, after which the student is guided through the steps. Finally, the student is allowed to try the activity alone. Language conventions, also known as speech acts, are taught at the first level of the program. These phrases include requests and apologies that a beginner would need to know. The student is shown a video with the phrase incorporated. The students tape their voice saying the phrase and play it back so they can listen to themselves. Playback gives instant feedback for self-analysis and speech awareness (Chapelle, 2001). The learner's attention is drawn to the differences between the original and their production and they are able to self-correct.

This concludes the overview of the main components of ILE. For the next section of this literature review, alternative computerized options for helping English Language Learners will be surveyed.

Programs Review

The 21st century brought the computer into the classroom as an instructional medium. Publishers are now moving to electronic format for textbook, e-books and e-text, teachers digitize materials for classroom instruction, and any information needed can be found on the Web (Goodwin-Jones, 2010, p. 4). Students associate computers with fun and games, independent work and real language use (Lee, 2000, p. 2). Computer assisted learning costs the same as conventional education but produces higher student achievement in less time (Lee, p. 4). Computer programs have emerged that allow for customized software that adjusts to the student's specific language needs (Rosetta Stone, 2010). There are "better interfaces, more features and enhanced flexibility" (Goodwin-Jones, p. 7). Programs are designed for motivated individuals; students who take the responsibility to work a program on a regular basis (Goodwin-Jones).

Jones). Interactive computer skills have been identified as the most important aspect of Webbased learning (Chou, 2003); thus there is a need for information literacy. We will now look at computer programs that are available for ELL/ESL support and language learning.

Computer programs have been demonstrated to assist with language learning; however, not all programs are of equal value (Chapelle, 2001). Language instructors cannot dedicate days to the creation of computerized teaching materials and for that reason they rely on developers' prepackaged programs. "Technology can be used to serve many different approaches" as long as each teacher molds the use of technology to individual beliefs about teaching and learning language (Warschauer, 1999, p. 163). Computer programs are made on two premises; the ways in which technology is used in normal activities, and "activities that are enhanced or created specifically for language teaching which do not occur in everyday life" (Kelm, 2010, p.7). In this category we see software packages that combine sound, pictures, movies and text in unique ways (Kelm). A review of some popular computer programs for ELLs follows.

Rosetta Stone. Rosetta Stone first came on the market around 1992 via a CD-ROM (Rosetta Stone, 1999). The creator of the program used computer technologies "to simulate the way that people learn their native language—with pictures and sounds in context" (Rosetta Stone, 1999). The earlier programs came with textbooks with extended written practice on the lessons performed on the computer. It soon became the forerunner in computer based language learning software and has added twenty-five foreign languages to their repertoire. Rosetta Stone teaches through images, text and sound but avoids direct instruction in grammar and native language comparisons (Gregory, 2009). Their main goal is conversational language and learning in context; not academic language. The images used to portray meaning contain still life photos of mainstream North American people from Washington, DC. Earlier versions of Rosetta Stone

involved uploading onto the computer the administration disk, and then the lessons were worked from a level 1 or a level 2 disk. Advancements now include on-line versions, 24/7 capabilities with an internet connection in the home, and administrator rights to organize student data. The self-motivated student can learn a second language with this program, since it builds on the premise that a student learns by listening. It is limited to listening skills and leaves the speaking skills up to student preference. There is a lack of grammatical instruction for basic language building skills, and little encouragement to get the student writing.

Ticket to Read. Another program used with low and struggling readers is a *Ticket to* Read. Students in a summer program that used Ticket to Read in first through fifth grades gained .06 to .18 points in final course tests. This is an "interactive, web-based student centered learning component that promotes practices of actual reading" (Peyton & Macpherson, 2009, p. 1). Students log on the program through their personal clubhouse. They accrue tickets by reading passages, which can be spent in furnishing the clubhouse and in playing games. Reading difficulties are scaled from first grade 1.5 to the seventh grade 7.0. Readings are both narrative and expository, and contain high-use content specific vocabulary words. The program is built on the premise of scaffolding, and a repeated reading procedure developed by Samuels (as cited by Peyton & Macpherson, 2009, p. 3). The program skips steps when students show the necessary comprehension getting them to a more difficult level quicker. Students can access the program from any internet connection giving additional after-school hour use to the participant. Teachers are able to monitor progress and see test results. It is not explicitly for ELLs but is a remedial reading program used with struggling readers. The motivational aspect of this program, with the personal clubhouse, should lend itself to motivating the student. The ability to work on the program at home is an attractive addition. The article did not discuss the impact of being applied

during the summer months when student interest in schooling declines. The authors found a low increase in test scores for fourth grade participants, with no explanations as to why that might have been. It could be part of the phenomenon known as the fourth year slump, when underachievement becomes most evident. The study was conducted for the parent company by researchers for Voyager Expanded Learning, Inc.

Earobics. Earobics was developed to meet the needs of struggling readers. It has been shown that direct explicit instruction that includes phonics training effectively improves student reading (Bucolo, 2010). Fluency instruction includes morphological skills that lead to a vast processing ability. An integral part of reading is multiple contacts with new vocabulary in various contexts. Earobics selected their vocabulary based upon core requirements; the frequency of occurrence, words which occur across all subject areas, words which are critical in one content area, and morphologically related word families. It uses teacher scaffolding and intensive instruction on using skills and strategies. Earobics builds into their program a varied reading selection, each with a customized lesson and activities that the student can choose to build on previous achievement. Program assessments are formative, as they evaluate student competencies which guide further structure. Tasks are meant to challenge students, not overwhelm them. There seems to be a concern about matching students to their readability level, but since this was an overview of the research behind the creation of the program there were no data available.

Phonics Based Reading and Strategies for Older Students. Phonics Based Reading (PBR) and Strategies for Older Students (SOS) are computer assisted instruction (CAI) that support phonic word-attack strategies which enhance word recognition (Macaruso, Hook, & McCabe, 2006). With computer assisted instruction, students can work fun and entertaining

activities at their own paces. The programs emphasize word-attack strategies for decoding at the letter/sound level, segmentation for phonemic analysis, and blending back into words for phonemic synthesis. Reading includes many processes beyond the ability to decode a word. A student must have knowledge of the meaning of the word as it appears in the text. A part of reading skill is to recognize sight words, such as those listed in the Dolch and Fry word lists. Just because a word is in the sight word list, or can be decoded using segmentation techniques, does not guarantee an understanding of the word.

Voyager Universal Literacy System. Voyager Universal Literacy System® has been proven effective with K-3 ELL students. Students work on computer-based practice activities and receive "reinforcement in phonological skills, comprehension, fluency, language development, and writing. The program uses whole classroom, small group, and independent group settings" (What Works Clearinghouse, 2007). Even though there was a positive effect for alphabetic and word recognition, there was a negative result in the area of comprehension. This may be due to lack of meaning that usually accompanies multiple syllable words in an ELL language base. Sounding out words that are beyond the understanding of a language learner will detract from comprehension. Visually connecting text to words aids in comprehension; however, there was no discussion about the level of visuals with the program.

Imagine Learning English. A qualitative study used *Imagine Learning English* (ILE) in a Hawaiian school with struggling and unmotivated readers. Twenty-seven first grade students took part in a three week observation period in which they were regularly asked to write down their feelings about the program after they had worked on it. They could draw happy or sad faces to show their level of motivation and what they like or disliked. The researcher found that as many students liked singing the songs as disliked singing them. In general, more of the program

elements were liked than disliked. The teacher used discussion times to talk about the computer program and student motivation. It is interesting to note that the one ELL student in the classroom used the program the least, was unable to write the daily reflection, and did not become motivated towards ILE or reading (Sumida, 2010). Students noted that self-consciousness was raised when they sang and recorded the songs for playback. This made them more aware of mistakes and limited free expression. Even though this was a private qualitative study, the company was involved because they gave additional licenses to include the total number of students in the classroom. The terms "most of" and "a few students" (Sumida, 2010) are not definite terms and allows for mediocre interest in the program being passed off as acceptable.

Due to the recent development of *Imagine Learning English*, there are few studies available to compare the effectiveness of the program. Two formal studies were commissioned by the company, ClearVue Research, Inc. (Timney & Timney) with first graders in Illinois and JointStrategy Consulting (Nelson, 2008) in California with sixth grade below level readers. Both of these studies worked with lower level students; those who lacked early literacy skills. The California study mentioned that its participants were ELL students and that participation hours were eliminated "because the small sample sizes did not provide adequate statistical power to detect significant effects" (Nelson). The Illinois students received an Early Literacy test to inform the teacher of the student's readiness for reading. They took the lowest cross section of students with poor reader skills as qualifiers for entry in the study. After putting this low sector of students into the ILE program, no mention was made of the number of hours of use. The JointStrategy study reported a three times higher increase in California State tests for ELLs than

non ILE users. The correlation between hours on ILE and increases on test scores were not used due to lack of significant results.

In working with the struggling ELL students in grades three through five, it has been observed that many of their reading problems stem from an inability to blend consonants, segment words into syllables, and properly pronounce multiple syllable words. ELLs tend to look at the first letter of a long word, say a word that begins with that sound without any connection to the interior word parts that are written on the page. Thus the invented word makes the sentence lose all logical sense, and the student is left guessing at what the author is trying to say. ILE does not work with multiple syllable words needed for fourth and fifth grade reading. Instead, the higher level ELP 3 and 4 students are playing games meant for students who are true beginners in the English language. ELLs are never exposed to multiple word segments or the vast capacity to blend these parts into new words in the ILE program.

The areas of reading comprehension in ILE include literal, inferential, cause and effect, contrast, plot, main idea, author's purpose, vocabulary, solution, synonym, and intertextual skills. The problem with these skills is that they occur in level two reading activities, and only literal and inferential questions appear in the first half of all the comprehension lessons. Very few of the ELL students in my study reached level two reading comprehension activities.

ILE claims to have the capacity to tutor a student at the level they are currently at by giving personalized instruction. This instruction should have the capacity to skip ahead if the student proves successful at the skill. High level students, ELP 4, doing reading comprehension tasks more appropriate for level two students have been observed. Rereading low basal text is not pushing that student to the next level of reading comprehension. ILE gives the teacher the option of entering the student's grade level and also of deciding whether or not the individual student is

a struggling reader. If the reader is grade four and not a struggling reader, than they should be provided with a grade level reading from 'Level two' in reading fluency and comprehension. ILE does not seem to allow skipping ahead to more difficult tasks when the student shows the capacity to perform the activity.

There are no studies available that look at statistics from grades two to five, either independent studies or ones done by researchers from ILE. Currently, only the lowest levels have been analyzed statistically. Within the two to four test ranges, there are no published statistical results showing an increase in ELL language ability. *Imagine Learning English* is designed as a program that is recommended for ELLs and the struggling reader. This paper looked at students in ELP levels two through four, in an attempt to see if there has been an increase in grades from district wide tests based on the time spent on the ILE program.

Having discussed the literature on computer-assisted language learning and ILE in particular, the hypotheses will now be stated. These hypotheses are followed by a discussion of the methodology used to see if there is a statistical difference in the achievement scores of ELLS who accessed ILE for fifteen hours or more during the course of the 2009 to 2010 school year when compared to those ELL students who did not.

Research Hypothesis. The aim of this study was to test the results of *Imagine Learning English* on students who are in the mid ranges of English Language Proficiency. As shown above, this program has proven effective on beginner and low level reading proficiency skills. Yet, after my observation during one year of active use by students in two schools, I began to suspect that the program may not have the same benefit for mid-range elementary ELL students. Warschauer, et al. (2000) and Moore (2000), state that learner-to-learner interaction is the most important factor in negotiating meaning once the student is beyond levels 1 and 2. This aspect is

not available in the current version of ILE. Consequently, the following two hypotheses were made:

H1: *Imagine Learning English* has had no direct effect upon reading improvement in the Language proficiency levels two, three and four of grades three, four and five.

H2: Students who used ILE for fifteen hours or more did not significantly improve their test scores on the WIDA ACCESS or MAPS tests.

III. METHODOLOGY

This is a quantitative study where a treatment group receives fifteen hours or more on the ILE program and the contrast group does not receive any time on it. The dependent variables compared are two county-wide assessment measures: WIDA ACCESS and MAPs. Thus, the dependent variable will be measured in an attempt to see if the independent variable caused any significant improvement in grades.

Samples and Procedures

I work with two suburban schools in northern Mississippi where the ELL population has access to the ILE program. The students chosen for this study were in the third through the fifth grade levels and had language proficiency levels from 2 to 4. Level one (beginning) students were not included in the study because they were 1) unable to speak English at the beginning of the year, 2) had not taken the WIDA ACCESS the previous fall, and 3) did not take the initial MAPS test. Also eliminated from the study were students who transferred from out of district and did not have both test measures available to evaluate growth. ELP levels five and six were not included in the study because of an inadequate number of student licenses; these students did not have the chance to build up fifteen hours of program use.

A list of the students who worked the program for fifteen hours or more was gathered. Students who had not completed 15 hours in the program were eliminated from the list leaving 30 treatment participants. A staff member of ILE suggested that the participants should have used ILE for at least fifteen hours for optimal statistical results (B. Elzinga, personal communication, May 13, 2010). For study purposes the following descriptions were used,

participants who used ILE are labeled "treatment group" and those that did not are labeled "contrast group."

Table 1 provides the demographic summaries of the treatment and contrast ELL groups used in the study. The treatment group came from two schools with an average of ninety percent Hispanic families in which Spanish is the home language. The ethnicity of the contrast group was ninety-seven percent Hispanic. These students were from grades three through five in three area schools. Place of birth was included as a representation of time in the United States. Free and reduced lunch status shows the socioeconomic level of the students from these schools. ¹

Table 1. Student Demographics						
Group	Home Language	US born	Foreign born	Free and Reduced Lunch		
Treatment	90% Spanish	70%	30%	90%		
Contrast	97% Spanish	66%	34%	94%		

Table 2 shows the breakdown of male to female students. 47% were male and 53% were female for a total study group participation of sixty-two students.

-

¹ Arabic students do not sign up for Free and Reduced lunch because of their avoidance of pork products. There was one such student in each group.

Table 2. Breakdown by Gender						
Group	Male	Female	Total			
Treatment	14	16	30			
Contrast	15	18	33			
Total	29	34	63			

Table 3 shows the ELP levels of the students in the treatment and the contrast group according the WIDA ACCESS test, administered at the end of the 2008/2009 school year. It was the ELP level from this test that determined inclusion and selection for the contrast group.

Table 3. English Language Proficiency						
Level	Treatment Group	Contrast Group				
2	6	2				
3	6	12				
4	18	19				

The treatment and contrast students were from grades three through five during the 2009 to 2010 school year. **Table 4** shows this breakdown by grade.

Table 4. Student Grades					
Grade	Treatment Group	Contrast Group			
3	17	16			
4	9	10			
5	4	7			
Total	30	33			

Assessment Instruments

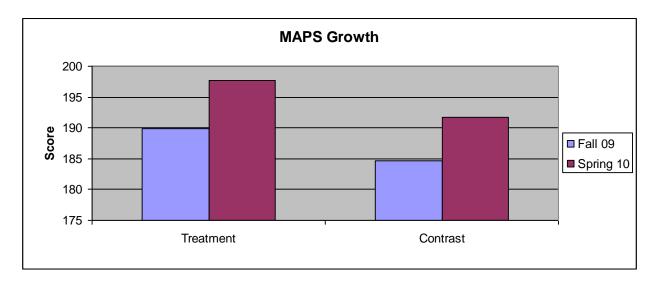
Two different assessments were considered in this analysis. The Measures of Academic Progress (MAP) was administered to the students at the beginning of the year and again at the end of the treatment period. The second assessment was the World-Class Instructional Design and Assessment (WIDA) ACCESS for ELLs and was administered at the end of the school year.

MAP. Each school in the district gave the measures of academic progress (MAP) assessment test to their students three times during the school year. This tested three areas; math, reading and language arts. It is intended to give a snapshot of student growth over the course of the year. For the purposes of this study, math and language arts scores were disregarded. The MAP report includes reading goal performances in the areas of word recognition and vocabulary, text features and structures, inferences, predictions and conclusions, and how to analyze and interpret text. The Language usage goals include the composition process, grammar, and the mechanics of sentence structure. The reading portion of the MAPS test coincides most closely with the ILE goals in the area of word recognition and vocabulary, text features and structures, inferences, predictions and conclusions, and how to analyze and interpret text; therefore, this is the section of the MAPS test used in this comparison study.

The MAP test is computer-based. The students read the screen and choose answers from four selections. If their answer is correct another more difficult question is given, if the answer is wrong, an easier question is presented. After completion, the student's scores are put into a continuum showing a comprehensive overview of curriculum skills.

The following is a chart showing the mean of student development from Fall 2009 to Spring 2010; comparing the Treatment and Contrast group.

Figure 1. MAPS Growth

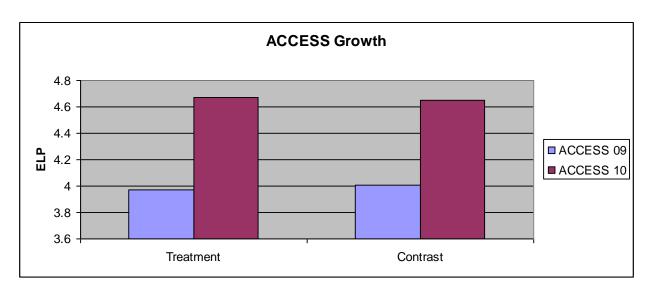


The t-Test: Two-Sample Assuming equal Variances was used when comparing the differences between Fall 2009 MAP scores with Spring 2010 MAP scores. Scores include percentile range and student growth comparisons in reading.

ACCESS. A second test that was used to check for an increase in scores through the *Imagine Learning English* program is the year-end World Class Instructional Design and Assessment's (WIDA) ACCESS test. This is a test of English language proficiency that assesses speaking, listening, reading and writing. There are three levels of tests for each grade cluster. The A test is for newcomers, the B test is for those who have not yet achieved English language mastery, and the C test is for the higher level, nearly proficient students. The participants in this study had all taken the grades three through five clusters (tests B and C). Scores are reported as overall proficiency levels and are broken down into the four areas of English language proficiency.

The ACCESS scores were compared using the F-test for two sample variance between the Spring 2009 ACCESS scores and Spring 2010 ACCESS results. The following chart shows the means of the Treatment group and the Contrast group.

Figure 2. ACCESS Growth



IV. RESULTS

The analysis included t-test and f test for variance for the research hypotheses. Results show that *Imagine Learning English* had no direct effect upon reading improvement in the ELP language levels two, three and four of grades three, four and five. Hypothesis one was shown to be true. Hypothesis two stated that students who used ILE for fifteen hours or more did not significantly improve their test scores on the WIDA ACCESS or MAPS tests. This hypothesis was also shown to be true.

Data

A T-test and a paired F-test for variance were computed for both ACCESS and Maps test results. The p<.05 level of significance was used as the level at which increases would be considered statistically significant for all of the statistical tests. An Excel spreadsheet was used to organize data and all numbers were checked twice against the test reports. A statistics tutorial provided by Excel was used to calculate the various tests and graphs used in this study.

A paired comparison F-test was used to compare the means of the Treatment group with the Contrast group on the ACCESS and MAPs test scores. The results were further broken down into grade levels and ELP levels to see if the subgroups showed variance. The results of the Treatment group to the Contrast group showed no significant improvement. The F-test for variance was used to see if gender could have played a role in test results. This also showed non significant levels.

Correlations between the number of hours in *Imagine Learning English* and test results in both Maps and ACCESS scores were also compared. Figure 3 shows the scatter plot of the

results of the MAPS test student gains and the time the student spent on ILE. The amount of time on the program did not show an impact on the students who used the program the most.

Figure 3. MAPS Growth 09-10

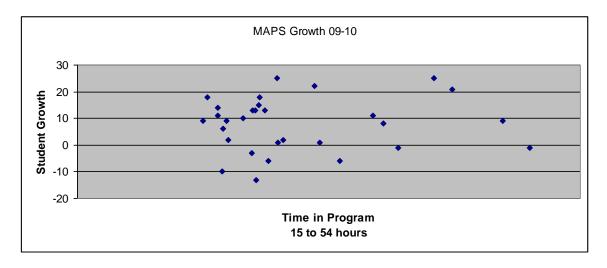
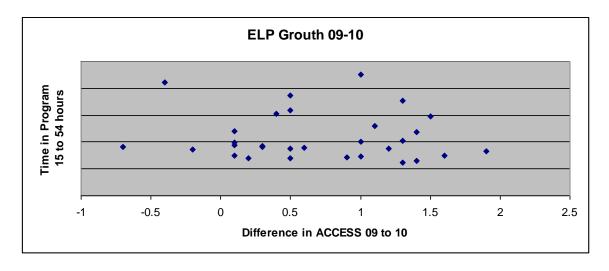


Figure 4 shows the scatter plot results from the Spring 2010 ACCESS tests as related to the amount of time spent on the program. No impact was shown.

Figure 4. ELP Growth 09-10



The F-test for variance comparing gender proved non significant between the Treatment and Contrast groups, and also as a test for comparison within the ILE treatment group.

Table 5 shows the results of the ACCESS test comparison between the Treatment and Contrast groups using the t-test for two sample variance. The Treatment and Contrast groups were divided into subgroups of grade and ELP levels, and scores were compared for significance. The t-tests showed a significant p-value.

Table 5. ACCESS

ACCESS									
Comparison using Grade level			Comparison using ELP level						
		Treatment	Contrast				Treatment	Contrast	
Grade 3	Number	17	16		Level 2	Number	6	2	
	Mean	1.01	0.76	p<.12		Mean	1.15	0.9	p<.38
Grade 4	Number	9	10		Level 3	Number	6	12	
	Mean	4.37	4.34	p<.47		Mean	0.4	0.72	p<.09
Grade 5	Number	4	7		Level 4	Number	18	19	
	Mean	0.28	0.43	p<.33		Mean	0.64	0.55	P<.35

Table 6 shows the results of the MAPS test between the Treatment group and the Contrast group broken down into the subgroups of grade and ELP levels. A t-test for variance of the subgroups of grades three, four and five and the three ELP levels was performed to check for variations between groups and no significance in the results was found. Non significant results were found, even when broken down into grade and ELP levels.

P			
using Grade level			
	Treatment	Contrast	
number	17	16	
mean	9.23	7.75	p<.29
number	9	10	
mean	6.9	8.9	p<.33
number	4	7	
mean	4.25	3.43	p<.45
using ELP level			
Number	6	2	
Mean	11.17	10.5	p<.47
Number	6	12	
Mean	10.17	6.58	p<.23
Number	18	19	
Mean	93.29	59.4	p<.34
	number mean number mean number mean number Mean Number Mean Number Mean Number	rising Grade level Treatment 17 mean 9.23 number 9 mean 6.9 number 4 mean 4.25 Rising ELP level Number 6 Mean 11.17 Number 6 Mean 10.17 Number 18	Treatment Contrast number 17

Interpretation.

H1: ILE will have no direct effect upon reading improvement in ELP levels two, three and four of classroom grades three, four and five.

This hypothesis is supported in the results. The research showed that no significant change between the Treatment and Control groups was observed. No true relationship between the use of ILE use and an increase in student grades was observed.

H2: Students who used ILE for fifteen hours or more will not significantly improve their test scores on the WIDA ACCESS or MAPS tests.

This hypothesis is supported in the results. The research found that there was no correlation between the number of hours of ILE use and reading improvement. No true relationship between the number of hours of ILE use and an increase in student grades was observed.

V. DISCUSSION

This section discusses the significance of these findings, points out some weaknesses of the study, and offers several suggestions about the need for future research in this area. Below is a discussion of the research questions that served as a guide for the study.

The Research Questions

Question 1: "Do students who use ILE for fifteen plus hours have a greater improvement on the World-Class Instructional Design and Assessment (WIDA) ACCESS when compared to those who do not?" The comparison of scores from the Treatment group and the Contrast group supported the null hypothesis.

Question 2: "Do students who use ILE for fifteen plus hours have greater improvement on Measures of Academic Progress (MAP) compared to those who do not?" Again the comparison of the mean of scores failed to show any correlation between number of hours in ILE and an increase in student ELP.

Question 3: "How does the progress differ among the three proficiency levels that participated in the study?" This question considered the progress among the three different proficiency levels that participated in the study to see if ELP students using ILE after fifteen hours out-performed the contrast group who did not use ILE. Again the comparison between the three levels of the Treatment and Contrast groups did not show any significant improvement.

Question 4: "How does the progress differ among the participants of three different grades that participated in the study?" Again the comparison between the Treatment and Contrast

group among the three grades that took part in the study did not show any significant improvement.

Limitations

Limitations of the study will now be considered. This study used ELLs who had taken two levels of the ACCESS test, the B or C level tests. Since a C level test is a higher English proficiency level test than the B test, the results of those who took the level B test may have skewed the results. Several students from both the Treatment and Contrast groups took this C level test. It was not part of my data compilation, so no analysis was made as to the effect of taking the higher level test. The test makers do calculate scale scores so that they can be compared across grades within subject areas (WIDA 2009, p. 6). A student who took the higher placement test was considered to have more advanced English language proficiency than the ELL student who took the B level test.

The *Imagine Learning English* program is divided into two levels; 1 and 2, for reading comprehension. For the purposes of this study those levels were ignored. A future study might divide the students who are working in the two levels, and categorize them as such. Thus, starting points were not taken into consideration when testing for the effectiveness of ILE.

Another variable in this study which is not considered as far as the results is that few ELLs had the same teacher. Because of the random placement of ELL students across the district, ninety percent of my data sample was students who had different teachers. If one student from a classroom went to work on the ILE program, then the second student in that classroom went as well. If a teacher had more than one ELL student and one student never went to work on ILE then the other student never went either. Teaching styles and teacher skill areas could be an important variable in future studies of the ILE program's effectiveness.

The duration of a student's participation in the United States public school system could be another important variable. This is another factor that may limit the generalizability of my results. The student demographics mentioned place of birth as "foreign" or "born in the United States." Data about the length of time in schools in the United States were not gathered; still another important variable which could have affected the results of this study. If a student learns to read in their native tongue then moves into a school in the U.S., their reading skills generally transfer quickly. This fact could have been another important variable because thirty-four percent of the Contrast group was foreign born.

Several ELLs who were in the study struggle with learning and comprehension in school. One of those in the Contrast group was changed to special education services at the school of attendance. Certainly learning challenged ELLs cannot be compared with non-learning challenged ones. As several students fell into that category, the results could have been skewed as well. This could be seen by the negative gains in both the ACCESS and MAPs test results by those students.

Suggestions for Future Research

Some implications for future research include but are not limited to the ideas expressed below. This paper did not look at student motivation for using ILE. Was motivation a positive or negative effect? Did the student use the time on the computer to escape from the classroom or were they using ILE as a learning tool? Why did some students fail to use the program as scheduled? Are there aspects of the program that students did not like; thus the low hourly usage of the students that were not included in this study? These are questions that could be addressed if the study were to be replicated in the future.

School administrators may want to research other programs or options for helping students to achieve annual progress. If the classroom teacher is just as effective in teaching the mid-level ELL as the ILE program, then more opportunities for training teachers to teach ELLs could be a more viable alternative to the cost of the ILE program. Continuing education and teacher training that includes teaching ESL/ELL students should be a regular part of required study.

Another aspect that might be considered in a future study is what is termed "the fourth year slump" (Engen, 2002). This is seen by low school performance in minority pupils when compared with the majority populations as they progress through the grade levels. Any time there is teaching without consideration for the linguistic and cultural backgrounds of the student who is not of the majority culture, the underachievement becomes more evident after the first four years of schooling (p.11). The disconnect between the bilingual and bicultural experience and the monolingual majority teaching lowers the minority student's level of cognitive functioning in school (p.12). The majority of this study's treatment subjects have been in school long enough to hit this critical fourth year, and have been exposed to the majority language and culture for the total extent of their education. Their true educational needs have to yield to the majority, causing them to underachieve to a much larger degree than their majority culture peers (p. 13).

The *Imagine Learning English* program does not use the intercommunication tools-learner to learner, but is designed on a learner-content premise. Research shows that interactive writing improves reading skills (Chappelle, 2001, Moore, 1993, Warschauer, Shetzer & Meloni, 2000). With the upcoming change in emphasis to the communicative assessment tool for Mississippi testing; Common Core Standards for Language Arts that is being adopted across the

United States, this area will have to be addressed in the near future by the producers of the ILE program.

Teaching ELL students is an ongoing challenge for schools across the country. The growth of the Hispanic population alone "is exceeding the most recent Census estimates by more than four percent" (Seidman, 2011). Even though computers have become a useful tool for teaching English as a second language, not all programs benefit the language learner as desired by developers of those L2 programs. In an age of budget cuts it is important that educators invest in tools that really make a difference.

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VITA

Dawn Waddell

EDUCATION

Bachelor of Arts in Interdisciplinary Studies preK-8 (2007) Western Governors University, Salt Lake City, UT

LICENSURE AND CERTIFICATION

Certified CLIMBS Instructor for WIDA States (2009) Mississippi Educator License TESOL Certificate (2000) Lincoln Christian College, Lincoln, Illinois

PROFESSIONAL EXPERIENCE

English Language Learner (ELL) Teacher, Desoto County Schools, MS, January 2009-Current

- Small group pull-out for language skills training
- Record keeping and scheduling for two schools
- Work with and train teachers to teach mainstream ELL students
- Translate and interpret for parent/school meetings at 12 county schools
- WIDA state training for WAPT and ACCESS testing of ELLs

Intervention Coach, Desoto County Schools, MS, 2008

- Developed skills' instruction for at-risk students.
- Scheduled student interventions while cooperating with teachers

Substitute Teacher, Shelby County, TN and Kelly Educational Staffing, MS 2007-2008

- Implemented positive classroom management strategies
- Taught to lesson plan.

Spanish Teacher, Charlotte, NC, August 2004 – June 2006

- Developed and implemented student centered lessons
- Adapted lessons to student's learning needs
- Implemented positive classroom management strategies
- Participated in team meetings, parent conferences, and field trips

English Teacher, Buenos Aires, Argentina, 1993 – 2004

- Created conversational English lessons
- Adapted lessons to students' learning needs
- Incorporated cross-cultural component into lesson

PROFESSIONAL AFFLIIATIONS

TESOL (2009) AMTESOL (2009) Presenter (2009)

CONTINUING PROFESSIONAL DEVELOPMENT

Mobile Devices iPad- Emphasis on Language Development (2011)

Kagan's Meet the Challenge; English Language Learners in the Regular Classroom (2011)

Classroom Instructions that Works for English Language Learners (2009)

Using Hands-on Materials in Math (2008)

Motivating at-risk Students (2008)

Interventions that Work (2008)

DIBELS (2008)

Hear Our Cry, Boys in Crisis (2008)

Writing and Selling Children's Books (2001)

Writing for Children and Teenagers (1998)

COMMUNITY INVOLVEMENT

Instructor of English for Parents (2010 to Present)

Ladies Day Planning Committee, Mid South Christian College, TN, (2006 to Present)